



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,413	09/28/2001	George G. Pappas	LUM 180	4358

7590 12/20/2002

Frank H. Foster  
KREMBLAS, FOSTER, PHILLIPS & POLLOCK  
7632 Slate Ridge Blvd.  
Reynoldsburg, OH 43068

EXAMINER

COCKS, JOSIAH C

ART UNIT	PAPER NUMBER
----------	--------------

3743

DATE MAILED: 12/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/966,413

Applicant(s)

PAPPAS, GEORGE G.

Examiner

Josiah C. Cocks

Art Unit

3743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. This application has been filed with formal drawings that are accepted by the examiner.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-13, 16, 17 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Henze* (US # 4,917,597) in view of *Pappas* (US # 5,842,850).

*Henze* discloses in Figure 1 a freestanding candle having a wick (3), a flame-resistant sheet (insulator sheet 6) joined/attached to the fuel body in proximity to a lower end of the wick, and a wick support (4) contacting the sheet and holding the lower end of the wick (see Fig. 1).

*Henze* possibly does not disclose that the wick support is sealingly bonded to the sheet, has an adhesive backing, the wick support is formed *in situ* unitarily with the wick, a flame-resistant agent impregnating the lower end of the wick, or the wick support is above the sheet sufficient to prevent a candle fire and specifically at least about half an inch.

*Pappas* teaches a wick support (40) that is sealingly bonded to its support layer by means of a plug (24) that also functions to form a support that is formed *in situ* unitarily with the wick

Art Unit: 3743

(see Fig. 7) and forms a flame resistant agent at the lower end of the wick (see col. 3, lines 38-48) and a wick support in the form of pedestal (90) that is attached to its support by adhesives (see col. 4, lines 38-41). *Pappas* further teaches that the wick support is high enough (i.e. at least half an inch) to prevent a candle fire (see col. 3, line 65 through col. 4, line 19).

Therefore, in regard to claims 1-13, 16, 17 and 23, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the wick support of *Henze* to incorporate the structure of the wick support of *Pappas* as this structure serves to permit the wax to be consumed before flame goes out from lack of fuel and prevents an unsafe flashover condition (see *Pappas*, col. 1, lines 38-59).

4. Claims 14, 15, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Henze* (US # 4,917,597) in view of *Pappas* (US # 5,842,850) as applied to claim 1 above, and further in view of *Gentry* (US # 3,317,290).

*Henze* in view of *Pappas* teach all the limitations of claims 14, 15, and 18 except that the sheet has a peripheral rim and is corrugated.

*Gentry* teaches a heat resistant sheet that has a peripheral rim/flange (20) and is corrugated (14).

Therefore, in regard to claims 14, 15, and 18, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the sheet of *Henze* to incorporate the sheet of *Gentry* as the peripheral flange and corrugations serve to form an enlarged chamber for holding a combustible fuel body (see *Gentry*, col. 2, lines 16-38).

Art Unit: 3743

5. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Henze* (US # 4,917,597) in view of *Pappas* (US # 5,842,850) as applied to claim 1 above, and further in view of *Pietruch et al.* (US # 6,155,451).

*Henze* in view of *Pappas* teach all the limitations of claim 19 except that the sheet is dome-shaped.

*Pietruch et al.* teach a lower sheet (148a) that is dome-shaped (see Figs. 7-8).

Therefore, in regard to claim 19, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the sheet of *Henze* to incorporate the dome shape of *Pietruch et al.* as the dome configuration desirably results in a savings of total wax required (see *Pietruch et al.*, col. 8, lines 55-65).

6. Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Henze* (US # 4,917,597) in view of *Pappas* (US # 5,842,850) as applied to claim 1 above, and further in view of *Hamblet* (US # 2,310,019).

*Henze* in view of *Pappas* teach all the limitations of claims 20 and 21 except for multiple wicks.

As shown in *Hamblet*, it is well known in the art that candles may have multiple wicks (22).

Therefore, in regard to claims 20 and 21, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the candle of *Henze* to incorporate the multiple wicks of *Hamblet* to provide greater light than a single candle (see *Hamblet*, col. 2, lines 8-15).

7. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Henze* (US # 4,917,597) in view of *Pappas* (US # 5,842,850) as applied to claim 1 above, and further in view of *Chambers et al.* (US # 5,961,318).

*Henze* in view of *Pappas* teach all the limitations of claim 22 except that the wick support is crimped.

*Chambers et al.* teaches a candle wick support that is crimped (see Fig. 2 and col. 3, lines 1-17).

Therefore, in regard to claim 22, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the wick support of *Henze* to incorporate the crimp of *Chambers et al.* for the desirable purpose of restricting the amount of fuel flow through the wick support to allow the wick to self-extinguish before the flame approaches the surface of a candle holder (see Abstract).

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. *Engman, Linton et al., Lynch, Leonard et al.*, GB 2603, and WO 97/36973 are included to further show the state of the art concerning candle wick support structure.

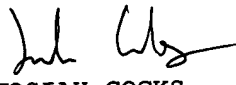
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Josiah Cocks whose telephone number is (703) 305-0450. The examiner can normally be reached on weekdays from 7:30 AM to 5:00 PM.

Art Unit: 3743

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Bennett, can be reached at (703) 308-0101. The fax phone numbers for this Group are (703) 308-7764 for regular communications and (703) 305-3463 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0861.

jcc  
December 16, 2002

  
JOSIAH COCKS  
PATENT EXAMINER  
ART UNIT 3743